

CLAIMS APPENDIX

Claims of U.S. Application No. 10/072 402 on Appeal

1-6. (Canceled)

7. (Previously presented) The graft copolymer of claim 21 comprising a backbone moiety consisting of both a hydrophobic moiety and an amine moiety, wherein said grafted moiety is an amine, amide, or mixture thereof.
8. (Previously presented) The graft copolymer of claim 21 wherein said amine comprises a quaternized amine, N-oxide, alkoxylated amine, or mixture thereof.
9. (Previously presented) The graft copolymer of claim 21 wherein said amine is at least partially neutralized.
10. (Previously presented) The graft copolymer of claim 21 wherein the weight ratio of said amine to said hydrophobe is from 1000:1 to 1:1000.
11. (Previously presented) The graft copolymer of claim 10 wherein the weight ratio of said amine to said hydrophobe is from 100:1 to 1:100.
12. (Previously presented) The graft copolymer of claim 11 wherein the weight ratio of said amine to said hydrophobe is from 10:1 to 1:10.
13. (Previously presented) The graft copolymer of claim 12 wherein the weight ratio of said amine to said hydrophobe is about 1:1.

14. (Withdrawn) A detergent or cleaning composition comprising a graft polymer comprising a backbone moiety and at least one moiety grafted onto the backbone moiety, wherein said backbone and grafted moieties comprise a hydrophobe and an amine or amide, and an ingredient selected from the group consisting of a surfactant, builder, enzyme, perfume, optical brightener, fillers, anti-fungal and anti-microbial agents, pigments, co-builders, anti-oxidants, dispersants, anti-foaming agents, acids, bases, preservatives, water-softening agents, sunscreen agents and mixtures thereof.
15. (Previously presented) A treated substrate comprising a substrate having associated thereon the graft copolymer of claim 21.
16. (Original) The treated substrate of claim 15, wherein said substrate is selected from the group consisting of textiles, fabrics, ceramics, paper, leather, wood, hair, skin, metal, tile, carpet, floor coverings, cementitious substrates, glass, plastic, non-wovens, concrete, insulation, mineral slurries, and shale.
17. (Previously presented) A control release formulation comprising an active substance encapsulated, coated, or associated with the graft copolymer of claim 21.
18. (Original) The control release formulation of claim 17, wherein said active substance comprises at least one water-soluble substance, at least one water-insoluble substance, or a mixture thereof.
19. (Previously presented) A method for the delivery of an active ingredient comprising:
- a) coating or encapsulating an active ingredient with the graft copolymer of claim 21;
 - b) introducing said coated or encapsulated active ingredient into an aqueous environment; and
 - c) decreasing the pH of the aqueous environment to solubilize the graft copolymer, thereby releasing the active ingredient.

20. (Previously presented) The method of claim 19 wherein the aqueous environment of step b) has a pH of greater than pH 8, and wherein the pH of said aqueous environment is lowered below pH 8 in step c).
21. (Original) A graft copolymer comprising:
- a hydrophobic backbone moiety selected from the group consisting of natural polymers, linear hydrocarbons, branched hydrocarbons and non-polymeric surfactants; and
 - an amine or amide moiety grafted onto the backbone moiety, the amine or amide moiety selected from the group consisting of methacrylates, maleates, methacrylamides, vinyl esters, methallyls and itaconates having an amine or amide functionality,
- wherein the graft copolymer is pH triggerable.
22. (Original) The graft copolymer of claim 21 further comprising a copolymerized moiety having at least two monomers selected from the group consisting of methacrylate, maleate, methacrylamide, vinyl esters, itaconates and styrenics.
23. (Original) The graft copolymer of claim 21 wherein the hydrophobic backbone moiety is a non-polymeric surfactant and the amine or amide moiety is methacrylate.
24. (Original) The graft copolymer of claim 23 wherein the non-polymeric surfactant is an alcohol ethoxylate.
25. (Original) The graft copolymer of claim 8 wherein the amine is a quaternized amine.